Guide to the Small Power Project Review Process in British Columbia

Ministry of Environment, Lands and Parks
Ministry of Energy, Mines and Petroleum Resources

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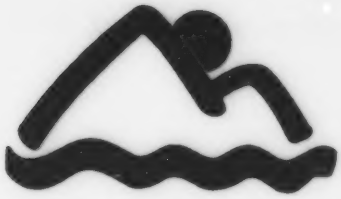

British Columbia
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Guide to the Small Power Project Review Process in British Columbia

Ministry of Environment, Lands and Parks
Ministry of Energy, Mines and Petroleum Resources

January, 1992

Recycled Paper

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GUIDE TO THE SMALL POWER PROJECT REVIEW PROCESS

Introduction

This is a guide to assist proponents of small power projects through the review process for small hydro and thermal electricity generation projects. The process applies to all projects which generate less than 20 MW of power for sale, and all projects which generate between 500 kW and 20 MW of power for the producer's own use.

The guide consists of three sections which cover the purpose, the procedures, and the requirements of the review process. Four appendices provide guidance on screening a project for potential environmental and socioeconomic impacts, provincial and federal government agencies that may be consulted, public consultation and other provincial approvals which may be applicable to energy projects.

Purpose of Small Power Project Review Process

There has been an increasing interest among independent power producers in generating electricity for sale to public utilities and industrial customers, or for their own use. Although these projects may be small in scale, they can have significant environmental and socioeconomic impacts. The following are some of the main areas of concern that have been documented in previous reviews:

(i) for hydro projects:

- fish and fish habitat;
- water quality, quantity and flow regime;
- transmission line and access road routing;
- wildlife and wildlife habitat;
- Native resource use;
- archaeological sites;
- conflicts with other land and resource users;
- environmental hazards (e.g. seismic risk); and
- downstream and transboundary effects.

(ii) for thermal projects:

- air pollutants;
- ambient air quality;
- waste disposal;
- water use;
- transmission line and access road routing;
- archaeological sites; and
- land use conflicts.

The type, magnitude and extent of the impact of small power developments result from their location, design and operation. Therefore, projects vary widely in their potential for environmental and socioeconomic effects. Site selection and project design are key aspects of environmental planning for small power projects. For example, run-of-river small hydro projects on high-gradient, low-productivity streams generally have less impact than projects involving impoundments and situated on low-gradient, productive streams.

There is a need to provide a screening process to separate those small power projects with minor impact from projects that may require further environmental and socioeconomic investigation. This preliminary assessment provides information on the broader implications and potential costs of a project at the time the project is proposed, whether the power is for sale or for the producer's own use. For some small power projects, the costs of mitigating or compensating for the environmental and socioeconomic impacts can be considerable; so much so that they may even prevent the project from proceeding. By identifying and assessing these potential impacts at the proposal stage, project proponents are able to carefully consider these potential costs early in the planning process.

Federal government agencies are responsible for ensuring that provisions of the 1984 Environmental Assessment Review Process (EARP) Guidelines Order are followed. The information project proponents are required to provide in an Environmental and Socioeconomic Screening (ESS) report, as part of the Small Power Project Review Process, is designed to also serve the information requirements for the initial environmental assessment (screening) of small power projects under the EARP. In addition, the federal Department of Fisheries and Oceans (DFO) has recently prepared guidelines and a technical report on small hydro development entitled, *Guidelines for the Protection of Fish and Fish Habitat at Small Hydro Developments*. Those guidelines are measures that can be used at various stages of project development to minimize damage to fish and fish habitat. Proponents will find the guidelines a valuable tool for project planning.

Environmental and Socioeconomic Screening Requirements

The requirement to submit an Environmental and Socioeconomic Screening (ESS) report applies to:

1. proponents of small power projects for sale of electricity; and,
2. proponents of small power projects from 500 kW to 20 MW for power for their own use.

Proponents of projects for sale of power are required to submit an ESS report (10 copies) with their proposal to the prospective electricity purchaser. Proponents of projects for electricity for the developer's own use are required to append the ESS report (10 copies) to the water licence application or waste management permit application.

Appendix I is a comprehensive guide to the ESS report preparation for small power projects. Project proponents are requested to present the information using the headings in Appendix I. The general approach is to:

1. describe the proposed project and its purpose;
2. identify the existing environment and resource use;
3. predict the significant environmental and socioeconomic impacts of the project; and,
4. outline proposed mitigation and compensation measures, and their estimated cost.

The information required will vary with the project type and location. Not every item in the list will apply to all projects. For example, the requirement to provide information on climate and air quality applies primarily to thermal power plants, whereas the requirement to provide information on water applies primarily to hydro projects. Before preparing an ESS report, proponents should consult with appropriate government agencies, Native groups, adjacent landowners and public interest groups, to identify environmental and socioeconomic concerns. This will focus the content of the report. Appendix II provides a list of federal and provincial agencies that may be contacted.

Since the ESS is a preliminary evaluation, the information should be comprehensive but not necessarily detailed. Information for the ESS report should be gathered from existing sources, on-site investigations and limited new studies, as required. Detailed assessment studies are generally not required until a project is short-listed for further review by the Small Power Committee. Proposed mitigation and compensation measures should include an estimate of their costs. The report should also include an outline of outstanding environmental, socioeconomic or public concerns that require further investigation. It is recommended that the ESS report be prepared by, or with the assistance of, a qualified consultant.

Consultation with the public during the planning stages of a project is essential for effective and responsible energy development. Public consultation is an ongoing process involving communication and interaction among government, industry and the public. A good public consultation program will result in informed, environmentally and economically sound decisions that are more sensitive and responsive to the values and concerns of

all interested parties. Proponents should involve all interested parties as early as possible so their concerns can be identified and addressed before irreversible decisions and commitments are made towards a specific approach or proposal. For further information on the development of a public consultation program, refer to Appendix III. The scope of the consultation should be commensurate with the size and potential impacts of the project.

The provincial government aims to review an ESS report within 90 days. However, the timing of a review and acceptability of a project will depend on the information submitted and the proponent's proposals for mitigating adverse impacts and addressing public and government concerns. Please note that a proposal will be returned to a proponent as deficient if information on each of the relevant subject areas is not complete.

Review Process

Project proposals may originate in a number of different ways. A proponent may respond to a *Request for Proposals* from a public utility, make a proposal to an industrial or commercial buyer (unsolicited or requested), or propose a project for private use. The information requirements described in this Guide will be the same, regardless. However, there are some variations in the basic review process applicable to projects depending on whether the project is for the generation of electricity for sale, or for the developer's own use.

A Small Power Committee (SPC) consisting of appropriate federal and provincial agencies has been established to coordinate the review of proposals. The SPC is chaired by the Ministry of Environment. Members of the SPC may include the Ministry of Environment (Environmental Assessment, Water Management, Environmental Protection, and Regional staff as appropriate), the Ministry of Energy, Mines and Petroleum Resources, federal agencies (Department of Fisheries and Oceans, Environment Canada or others) the buyer (B.C. Hydro, West Kootenay Power Ltd., industrial/commercial buyer), and other government agencies (e.g. Ministry of Aboriginal Affairs), as appropriate. During the review, where federal interests apply, the federal government will screen each project under EARP. Proponents will be advised through the SPC, or directly through the federal agency involved, if a project is to be subject to further assessment under EARP.

The steps in the review process as it applies to projects for power for sale and for own use are outlined in Figures 1 and 2 and described below.

A. Review Process for a Project to Generate Power for Sale

Step 1: The electricity buyer makes a call for proposals from independent power producers.

Step 2: If the power is for sale to B.C. Hydro, the proponent consults B.C. Hydro on interconnection feasibility. The proponent submits a Water License Application (small hydro, and thermal if required), or Waste Management Permit Application (small thermal, if required) and an application for tenure over Crown land[1], if required, to the appropriate branch of the Ministry of Environment, Lands and Parks. Application must be made to the Ministry of Forests for forest land use

Step 3: The proponent conducts technical and financial analysis of the proposed project and consults affected government agencies, Native groups, public interest groups and individuals to identify key issues and concerns.

Step 4: The proponent prepares and submits a proposal, including an ESS report, to the buyer.

Step 5: The buyer reviews the proposals and establishes a preliminary short-list based on technical feasibility and price. (For projects in B.C. Hydro's *Small Independent Power Program*, B.C. Hydro sets the price and accepts projects on a first come, first served basis provided the projects meet B.C. Hydro's interconnection requirements). The buyer then refers the ESS report from each short-listed proposal to the SPC for review.

Step 6: The SPC will conduct a review of each ESS report and make recommendations regarding the final short list of projects, further information needs, and the appropriate review process for short-listed projects. The SPC review will include referral of the water licence or waste management permit application and ESS to affected agencies.

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1 Interest in Crown land cannot be established prior to project approval. However, a proponent may request that the Ministry of Environment, Lands and Parks put a Notation of Interest on land to ensure the land is not allocated to a competing interest. Alternatively, a proponent may apply for a Section 10 permit for "temporary ocupation" for access or investigative use of Crown land.

Step 7: Once the SPC has finalized a short list, the electricity purchaser will inform proponents about which projects were short-listed. Proponents of short-listed projects will be told:

1. they have been selected to begin contract negotiations;
2. which review process the project will be subject to (i.e. the Energy Project Review Process, the Water License Adjudication Process or the Waste Management Permit Process); and
3. what additional information is needed to complete the review.

Failure to fully satisfy additional information requirements will lead to suspension of further review of the proposal.

Proponents and the buyer will then begin contract negotiations and the proponent will start preparation of additional information, as required. Contracts will be subject to regulatory approvals. (A standard electricity purchase agreement is used by B.C. Hydro for projects in their *Small Independent Power Program*. Terms and conditions of the standard agreements are not negotiable).

Step 8(a) **Water License Adjudication Process or Waste Management Permit Process**

If there are no significant impacts associated with the proposal and the impacts identified can be mitigated, projects may be considered in the context of the normal Water License Adjudication Process or Waste Management Permit Process. Adjudication of water license applications will be done on a first come, first served basis.

Step 8(b) **Energy Project Review Process**

A project may be designated by Order in Council as *regulated* under section 16(2) of the Utilities Commission Act (the U.C. Act) and subject to a review under the Energy Project Review Process (EPRP) if:

1. there are significant environmental or social impacts or public concerns as determined by the SPC in Step 6;

2. the power is for export; or

3. the project is deemed to be significant in the matter of energy and warrants regulation for some other reason.

A proponent of a *regulated project* must submit an Energy Project Certificate Application (EPCA) to the Minister of Energy, Mines and Petroleum Resources, in accordance with section 18 of the U.C. Act. The ESS report will form the basis of the EPCA. Proponents will likely be required to complete additional studies, as identified in the SPC review of the ESS or as required under B.C. Regulation 388/80.

Based on the results of the review under the EPRP, the Minister, with the concurrence of the Minister of Environment, Lands and Parks has three disposition options as follows.

1. Under section 19(1)(a) of the U.C. Act, the EPCA may be referred to the B.C. Utilities Commission (BCUC) for a public hearing. Based on the Report and Recommendations of the BCUC, Cabinet will decide to approve or reject the Application. If approved, an Energy Project Certificate is issued with terms and conditions of construction. Once construction has been completed, to the satisfaction of the Ministers, the proponent would be required to apply for and obtain an Energy Operation Certificate.

All projects for the export of power will be subject to a public hearing (see Note 1 below).

In addition, if a project is deemed by a federal agency to have the potential for significant environmental effects, a public hearing will be required under EARP. Usually, in such a case, there will be a combined provincial/federal hearing under the auspices of the Commission with recommendations being submitted jointly to the provincial and federal governments.

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1 If a project is developed for export of power the proponent will required to:
(a) obtain an Energy Removal Certificate from the Province;
(b) obtain an export licence from the National Energy Board; and,
(c) secure a wheeling arrangement with B.C. Hydro for the transmission of electricity to a delivery point at the B.C. border.

2. The Ministers may approve a project under section 19(1)(c) of the U.C. Act. A Ministers' Order, with terms and conditions of construction and operation, will be issued. This Order gives approval to a project subject to the proponent obtaining applicable permits, licenses and approvals, completing additional studies, and meeting any other requirements as specified in the Order.

3. The Minister may reject an EPCA under section 19(1)(d) of the U.C. Act.

B. Review Process for Projects to Generate Power for Own Use

Step 1: The proponent proposes a project to generate between 500 kW and 20 MW of electricity for own use.

Proponent submits a Water Licence Application, (small hydro, or small thermal if required), Waste Management Permit Application (small thermal, if required) and application for tenure over Crown land, as required, to the appropriate branch of the Ministry of Environment, Lands and Parks.

Step 2: The proponent consults with government agencies, Native groups, public interest groups and individuals affected by proposed project to identify key environmental and socioeconomic issues and concerns.

Step 3: Proponent prepares and submits an ESS report as addendum to application for a Water Licence or Waste Management Permit.

Step 4: The appropriate branch of the Ministry of Environment does a referral of the application and ESS report in the context of the normal licensing/permitting process.

Step 5: Based on the results of the referral, and its own analysis, the licensing/permitting branch may:

1. complete the review through the normal licensing/permitting process; or

2. refer the ESS report to the SPC and recommend that the project be regulated under the U.C.Act and made subject to the EPRP if there are significant environmental or socioeconomic impacts or public concerns.

Step 6: If the licensing/permitting branch recommends Option 2 in Step 5, the SPC will:

1. decide on an appropriate review process;
2. inform the proponent if project is to be subject to EPRP; and
3. initiate EARP, if necessary.

Step 7(a) **Water Licence Adjudication Process or Waste Management Permit Process**

If a project is not *regulated* under the U.C. Act, a review is completed under the normal licensing/permitting process. Applications will be adjudicated on a first come, first served basis.

Step 7(b) **Energy Project Review Process**

If the decision is to review a project through the EPRP, an Order in Council will be passed regulating the project under section 16(2) of the U.C. Act.

Proponents of a *regulated project* must submit an EPCA to the Minister of Energy, Mines and Petroleum Resources, in accordance with section 18 of the Act.

The ESS report will form the basis of the EPCA. Proponents will likely be required to complete additional studies, as identified in the preliminary review of the ESS report or as identified pursuant to B.C. Regulation 388/80.

When submitting an EPCA to the Province, proponents are not required to resubmit the ESS report. A letter of transmittal, affidavit and information noted above may be submitted as an addendum to the original proposal. This package of information will be referred by the Ministry of Energy, Mines and Petroleum Resources, to various regulatory agencies that have expressed concerns during the preliminary review, and to other agencies that may have an interest in the project.

Based on the results of the review under the EPRP, the Minister of Energy, Mines & Petroleum Resources, with the concurrence of the Minister of Environment, has three disposition options, as described in step 8(b) in the section on the process for projects for a sale of power.

All projects for the export of power will be subject to a public hearing (see Note 1).

In addition, if a project is deemed by a federal agency to

have the potential for significant environmental effects, a public hearing will be required under EARP. Usually, in such a case, the federal and provincial governments have agreed to joint hearings under the auspices of the BCUC with recommendations being submitted jointly to the provincial and federal governments.

If a project is initially constructed for a developer's own use and the power is later offered for sale, the proponent may also need to apply to the Minister of Energy, Mines and Petroleum Resources for exemption under section 27 of the Act from regulation as a *public utility*. This exemption may include additional terms and conditions on the operation of the project.

Inquiries regarding the small power project review process should be directed to the following:

Director
Environmental Assessment Branch
Ministry of Environment, Lands and Parks
5th Floor, 1312 Blanshard Street
Victoria, British Columbia
V8V 1X5

Director
Energy Project Analysis Branch
Ministry of Energy, Mines and
Petroleum Resources
Room 433, 617 Government Street
Victoria, British Columbia
V8V 1X4

Copies of the *Guide to the EPRP* are available from the Energy Project Analysis Branch, Ministry of Energy, Mines and Petroleum Resources. Copies of the *Utilities Commission Act* are available from Crown Publications at 546 Yates Street, Victoria, British Columbia, V8W 1K8 (604-386-4636).

GLOSSARY OF TERMS

BCUC	British Columbia Utilities Commission
Compensation	Refers to a transfer payment, in cash or in kind, made by a developer to redress or offset the environmental or socioeconomic loss if impacts cannot be mitigated. The payment is made to either a government agency or the people who bear the cost to enable them to take action to redress remaining losses. It should be noted that compensation is not a preferred option and may not be acceptable. DFO has a policy of no net loss of fish and fish habitat (*Policy for the Management of Fish Habitat*, DFO, Ottawa, October 1986). Cash payment is not acceptable to DFO as a form of habitat compensation. DFO requires replacement of natural habitat, increase in the productivity of existing habitat, or maintenance of fish production by artificial means in circumstances dictated by social and economic conditions, where mitigation techniques and other measures are not adequate to maintain habitats for Canada's fisheries resources.
DFO	Department of Fisheries and Oceans (Canada)
EARP	Environmental Assessment and Review Process
EPCA	Energy Project Certificate Application
EPRP	Energy Project Review Process
ESS	Environmental and Socioeconomic Screening
Mitigation	Refers to actions taken by developers in project planning, design, construction and/or operation to avoid or minimize adverse environmental effects of the development.
Run-of-river	A type of hydroelectric facility that releases water at the same rate as the natural flow of the stream, i.e. outflow equals inflow.
Short-list	List of projects which may commence contract negotiations with buyer and will be given further environmental/ socioeconomic review as required.
SPC	Small Power Committee

Small Power Project	A hydro or thermal electricity generating plant that produces less than 20 megawatts of power. A small hydro project uses the energy of flowing water to generate electricity whereas a small thermal project uses energy from the combustion of woodwaste, coal, natural gas, or municipal waste or from geothermal sources to produce electricity.
U.C. Act	Utilities Commission Act
Wheeling	Refers to the process of transmitting electricity through facilities owned by a third party utility, other independent power producer, industrial or commercial buyer.

APPENDIX I

Guide to Environmental and Socioeconomic Screening for Small Power Projects

A. Overview Summary

The overview summary should serve as a ready fact sheet on the project. Information should be provided on Form A (attached) which requires the following information: the name, address, telephone number and facsimile number (if applicable) of the proponent and the project manager. The project should be very briefly described, including the type of project, the size (installed or nameplate capacity and average annual energy production), and the location.

B. The Project

Information in this and the following sections should be appended to the Overview Summary.

This section should outline the project, and the plans and timing for its design, construction, operation, maintenance and eventual abandonment.

1. Location

1.1. The geographic setting must be clearly defined by including at least two maps (oriented to true north) in the proposal:

(a) a small-scale location map (1:100,000 to 1:250,000) showing the project development area relative to recognizable geographical features such as major rivers and urban centres; and,

(b) a large-scale map (1:20,000 to 1:50,000) of the development area showing local topographic features; major rivers and creeks; significant natural and cultural features such as parks, historic sites, Indian reserves, etc.; and the location of the components of the proposed project.

1.2. Diagrams (to scale) and descriptions of the physical layout of the project components which, depending on the type of project, might include power facilities (including stack height and

diameter); access road(s); transmission line(s); dam, intake, penstock and tailrace; and any physical mitigation structures such as fishways, and compensation structures such as spawning channels. Private and public lands affected by the project should be identified including roadways, railways, other rights-of-way and their ownership.

1.3. If the proposed project is a hydro facility, comparative maps of the proposed reservoir area before and after reservoir filling where an impoundment is involved or, where a diversion is proposed, a map of the augmented and diminished stream channels and of the floodway corridor (area of inundation) downstream of the dam.

2. Design and Construction Plans

2.1. Outline of proposed engineering design and construction schedule.

2.2. Construction methods to be used which have environmental implications such as timber removal, large earth moving, placement and removal of coffer dams and diversion technique.

2.3. Borrow sites for local construction materials.

2.4. Environmental surveillance and monitoring plan during construction.

3. Operation and Maintenance Plans

3.1. Outline of the commissioning technique.

3.2. Type, quantity and toxicity of waste materials produced during project operation and maintenance.

3.3. Anticipated mode of operation. For small hydro projects this should include a schedule of discharges and reservoir storage. For small thermal projects, this should include proposed exit velocity/flow rate and temperature of air emissions.

3.4. Environmental surveillance and monitoring during operation.

3.5 A contingency plan for protecting resources in an emergency. For example, the protection of fish habitat during low flows, floods or failure of the mitigation measures to function properly.

4. Abandonment

4.1. Outline the plans for eventual abandonment of structures and rehabilitation of disturbed areas.

C. Environmental and Socioeconomic Impacts

This section should describe the existing environment and resource use in the area that would be affected by the proposed development and the significant probable environmental and socioeconomic impacts of the construction and operation of the project. The following concerns, identified in previous assessments, are provided to assist proponents in identifying the significant environmental and socioeconomic components and the potential impacts of their proposal. Any gaps in information should be noted.

1. Fish and Wildlife

1.1. Seasonal abundance and distribution of affected species of fish and wildlife.

1.2. Presence of rare, threatened or endangered species.

1.3. Critical times, e.g., spawning, migrating.

1.4 Critical or highly productive habitats for fish or wildlife, e.g. winter range, spawning area.

1.5. Anticipated changes in abundance and diversity of fish and wildlife and loss of rare, threatened or endangered species as a result of, for example:

- disruption of food chains;
- loss or alteration of habitat;
- direct disturbance, injury or mortality;
- increased hunting or fishing;
- release of deleterious substances;
- introduction of exotics, parasites and diseases; and,
- changes in hydrological, temperature or nutrient regimes.

2. Water

This category of information applies primarily to hydro projects.

2.1. Existing hydrologic regime.

2.2. Anticipated changes in surface water including any changes in:

- the flow regime and fluctuations in storage;
- water quality;
- sedimentation rates;
- water quantity as affected by storage or diversions;
- occurrence of various ice formations; and
- unique physical features such as rapids or falls.

3. Climate and Air Quality

This category of information applies primarily to thermal projects.

3.1. Ambient air quality.

3.2. Winds (seasonal direction, strength, duration).

3.3. Anticipated changes in air quality, and deposition of contaminants.

Information categories 4, 5 and 6 apply to all project types.

4. Vegetation

4.1. Rare or endangered flora.

4.2. Anticipated changes in plant communities as a result of alteration of terrain, hydrological regime or air or water quality.

5. Terrain

5.1 Geologic conditions and possible seismic hazards.

5.2. Unique geologic or landform features.

5.3. Soil sensitivity and erosion hazard.

6. Land and Other Resource Use

6.1. Existing and planned land and other resource use in the development area, including for industry, municipalities, agriculture, forestry, fishing, trapping, hunting, mining, municipalities, recreation, ecological reserves, parks, transportation and tourism.

6.2. Ownership of and interests in affected lands (i.e. land status) and resources (e.g. mineral claims, water licences).

6.3. Local land use zoning, official plan and bylaws and regional development plans.

6.4. Native lands and activities.

6.5. Archaeological and historical sites.

6.6 Anticipated impacts on the land and other resource uses. For example, a hydro project may alter other resource uses by flooding lands or resources or by reducing the availability of water for other activities such as irrigation-based agriculture.

7. Socioeconomic Impacts

The construction and operation of a project can have significant socioeconomic impacts on the surrounding area. The effects may be short term, occurring only during the construction period, or long term if the project induces other activity and development.

Consideration should be given to potential impacts on:

- employment;
- revenue to the provincial government e.g. water rentals, taxes;
- infrastructure, e.g. public roads; and
- local community.

D. Proposed Mitigation Measures

Many impacts of small power developments can be avoided or minimized through careful site selection and various design, construction or operation techniques. In this section, the major impacts described in the previous section should be listed in point form together with proposed mitigation measures and monitoring programs, including an estimate of their cost.

E. Public Consultation

This section should summarize the public information and consultation activities that have been undertaken to date and the program that is planned during the development of the project. This should include:

- a list of the government agencies, interest groups and affected individuals contacted;
- concerns raised;
- proposals to resolve these concerns; and
- issues that need to be addressed.

F. Further Studies Proposed

This section should outline further studies proposed to address information gaps and determine the nature and extent of possible impacts and the type of mitigation measures needed.

G. Permits and Licences

List permits, licences and approvals needed as part of project development from provincial, federal and local government agencies. Appendix IV is a list of provincial approvals which may be applicable to energy projects which could be of assistance.

FORM A

OVERVIEW SUMMARY

Project Name: _____

Project Proponent

Name: _____

Address: _____

Telephone: _____

Facsimile: _____

Project Location: _____

_____

_____

_____

(Include latitude and longitude coordinates)

Project Manager

Name: _____

Address: _____

Telephone: _____

Facsimile: _____

Project Type

___ hydroelectric

___ cogeneration (describe fuel type and thermal host)

___ geothermal

___ municipal waste

___ biomass (e.g., woodwaste)

___ other (describe)

Size (installed capacity): _____

Expected Operation Date: _____

APPENDIX II

GOVERNMENT CONTACTS/REVIEW AGENCIES

Provincial Government:

Ministry of Environment, Lands and Parks

Ministry of Development,
Trade and Tourism

Ministry of Health

Ministry of Aboriginal
Affairs

Ministry of Transportation
and Highways

Ministry of Agriculture
and Fisheries

Agricultural Land Commission

Ministry of Energy, Mines and
Petroleum Resources

Ministry of Forests

Ministry of Municipal Affairs,
Recreation and Culture (Programs and Archaeology)

Federal Government:

Environment Canada

Department of Fisheries and Oceans

Transport Canada

Coast Guard (where there may be an impact on navigable waters)

Department of Indian and Northern Affairs

Local Government:

Proponents should also contact the appropriate municipal or regional government representative.

APPENDIX III

PUBLIC CONSULTATION PROCESS

The major components of a public consultation program include initial contact, notification, consultation and follow-up discussions. The scope and form of public consultation will depend upon the particular characteristics of each project.

1. Design of the Public Consultation Plan

Information collected and contacts established in the initial project planning stages provide a basis for preparing a public consultation plan. A complicated or extensive document is not required. However, it can be critical to the effectiveness of the consultative process. The proponent should have a clear idea of the objectives to be achieved and the type of approach to be used to meet the objectives.

In preparing the public consultation plan proponents should investigate the following:

(a) *What are the objectives of consultation?* Determine what you want to achieve and how the public input will be utilized in project planning and management.

(b) *Who is going to be affected?* Determine the various groups, institutions and individuals likely to have an interest in the project. Particular attention should be paid to identifying Native Bands and Tribal Councils in the region where the proposal is located.

(c) *What are the major issues?* Determine, to the extent possible, the key concerns and the level of concern to be addressed during the consultation process.

(d) *What information is required to address the issues?* Determine the technical information which will likely be required in order to respond to the major issues during the consultation process.

(e) *What methods and materials are appropriate for consultation?* Determine the most suitable form of consultation and the type of written, display or other materials necessary for presenting information to the public.

(f) *What consultative program is proposed?* Determine the specific timing, location, participants, procedures and resources for the public consultation program.

This public consultation plan should be prepared and implemented as soon as possible after initial contacts have

been made with the public. Uncertainties are likely to exist so flexibility is necessary to adjust the plan during the process. Consideration should also be given to establishing a method for evaluating the effectiveness of the public consultation program.

2. Data Collection and Initial Contact

Preliminary research into the social, environmental and land use characteristics of potential project locations provides an initial indication of *affected publics*. A list of potential participants in the consultative process should be prepared. Background profiles of the communities in the area, development trends and issues and previous public concerns provide useful information in determining the scope of public consultation.

At this stage, preliminary objectives of public consultation should be defined in accordance with the nature of the proposed project.

The proponent should meet with local governments and key interest groups and members of the public to explain the project, to hear key issues and concerns and to receive suggestions on who should be involved and how consultation should proceed. This initial contact is important in establishing a personal relationship between proponent staff and community members.

3. Inviting the Participants: Public Notification

Ensure that the public is notified of the proposed consultation program and is given adequate time to prepare for discussion. Providing information on the project well in advance of public discussions will contribute to better-informed participants. It may be necessary to actively encourage local participation. Opportunities for participation should also be provided for individuals unable to attend the advertised public sessions (e.g., written submissions).

Where the general public is being invited, a notice of proposed public sessions should be published in local newspapers and broadcast on local radio stations at least two weeks in advance of the public sessions. Proponents should be particularly attentive to soliciting Native concerns and issues associated with their proposal.

4. Implementing the Consultation Plan: Public Discussions

A range of techniques is available to provide for public discussions of a project. These include: individual contact, community presentations, meetings, workshops, open houses, advisory committees, newsletters, questionnaires and

various other methods. Once the appropriate methods of consultation are selected, the organization and procedures need to be carefully planned to ensure effective participation. A means of recording participant's views should also form part of the proceedings.

5. Following-up on Discussions: Response to Public Issues

Follow-up response to specific concerns or questions is usually necessary after the organized public discussions. Participant's comments should be analyzed and, where appropriate, acted upon. The response(s) to public comments may include further consideration of issues related to:

- project justification;
- project siting;
- project design and safety;
- project impact mitigation/compensation;
- project construction; and,
- project operations.

6. Report on Public Consultation

The public comments and discussions on the project should be summarized and included in the ESS report. The report should contain a description of the design, implementation and results of the public consultation *efforts*. This includes documenting concerns raised by the public and the proponent's response to public concerns. It should provide documentation of public consultation activities in order to assist subsequent decisions on disposition of the proposal and, in certain cases, subsequent public hearings and review of the proposal.

7. Other Information Sources

Other information sources on this subject include the *Public Consultation Guidelines for the Canadian Petroleum Industry* (CPA, October 1989), the National Energy Board's, (September 6, 1989), *Draft Memorandum of Guidance* regarding public notification of proposed applications for federal certification, and the Energy Resources Conservation Board's *Information Letter IL89-4*.

APPENDIX IV

PROVINCIAL APPROVALS WHICH MAY BE APPLICABLE TO ENERGY PROJECTS

Relevant Provincial and Federal Statutes

Introduction

It is the responsibility of each proponent to ensure compliance with all relevant enactments, including provincial, federal and local government requirements. This Appendix contains a list of the key provincial and federal statutes which may be applied to energy projects. However, this list is not exhaustive. Accordingly, it is the responsibility of each applicant to ensure that all regulatory requirements relative to a particular energy project are identified and satisfied.

Agriculture Land Commission Act

Agricultural Land Commission; Ministry of Agriculture, Fisheries and Food

- Permission to use land in an agricultural land reserve for a purpose other than farm use. Compliance with Guidelines for Linear Development on Agricultural Land; Memoranda of Agreement and Protocols regarding petroleum and natural gas exploration production.

Boiler and Pressure Vessel Act

Ministry of Municipal Affairs, Recreation and Culture

- Approval of all boiler, pressure vessels and refrigeration plants.

Coal Mine Regulation Act

Resource Management Branch, Mineral Resources Division, Ministry of Energy, Mines and Petroleum Resources.

- Approval of mine plan by Chief Inspector, including work system and support system approval; Stability approval for tailing impoundments; Reclamation permit authorizing commencement or continuance of work in accordance with approved program for reclamation and conservation.

Environment Management Act

Ministry of Environment

- Requirements for impact assessment, environmental protection order, as required.

Fire Services Act

Local Fire Commissioner, Ministry of Attorney General

• Regulations for the storage, handling and use of flammable and combustible liquids; Permit system in connection with the storage of flammable and combustible liquids.

Fisheries Act (B.C.)

Fisheries Branch, Ministry of Environment

• Requirements for designated rivers, streams or waterways regarding the provision of fish protective devices on dam or hydraulic projects; Approval of plans affecting the passage of fish.

Fisheries Act (Canada)

Federal Department of Fisheries and Oceans

• The federal Fisheries Act contains requirements regarding the harmful alteration of fish habitat, construction of fishways or canals, the provision of fishstops or diverters and the flow of water and, also, pollution control provisions regarding the deposit of deleterious substances in water. Provincial conservation officers, where designated fisheries officers, are also charged with enforcement of the federal Fisheries Act.

Forest Act

Ministry of Forests

• Permission to use provincial forest for other than the enumerated purposes; Licence or permit for cutting timber; Permit for the use of fire.

Gas Safety Act

Safety and Standards Department, Ministry of Municipal Affairs, Recreation and Culture.

• Approval of installation or alteration of gas piping, appliance or vent in any premises. Also inspections, equipment approvals, licensing of tradesmen and registration of contractors.

Gas Utility Act

B.C. Utilities Commission

• *Gas utility* subject to regulation under the Utilities Commission Act, including requirements regarding regulated projects involving the storage, use and transmission of gas. Use to facilitate expropriations.

Health Act

Medical Health Officer

• The Health Act has regulations which pertain to the establishment of industrial work camps; the disposal of sewage, garbage and refuse; the sanitary operation of food premises; the purveyance of safe drinking water and a provision of the Act prohibits discharges into the land, water or air of a substance that is, or may be, a health hazard.

Heritage Conservation Act

Archaeology Branch; Ministry of Municipal Affairs, Recreation and Culture

• Permit to excavate or otherwise alter a provincial heritage site designated under Section 4 of the Act or an archaeological site listed under Section 6 of the Act.

Highway Act

Regional Approving Officer, Ministry of Transportation and Highways

• Approval of plans affecting designated highways and access to highways, including setback and sight clearance restrictions.

Highway (Industrial) Act

Highways Branch, Ministry of Transportation and Highways

• Restrictions regarding the construction, location and operation of industrial roads, including the requirement of approval to cross or join a public road or highway.

International Boundary Waters Treaty Act (Canada)

Joint Commission (IJC) for non-binding recommendations.
International Joint Commission

• The International Boundary Waters Treaty Act has the responsibility for approving works that would affect water levels in the other country (Canada or US) as well as setting up a dispute resolution mechanism administered by the International

International Rivers Improvement Act (Canada)

Inland Waters Directorate, Environment Canada

• The federal International Rivers Improvement Act requires a permit for projects that involve specific changes to the flow of international watercourses (e.g. quantity or timing of flows, etc.).

Land Act

Regional Operations, Ministry of Lands and Parks

• Requirements regarding the disposition of Crown land, including sales, leases, license of occupation, rights-of-way, easements and leases or other dispositions of building or construction materials; Permission to construct upon Crown land, including access roads; Gravel removal order.

Mining Regulation Act

Resource Management Branch, Mineral Resources Division, Ministry of Energy, Mines and Petroleum Resources

• Approval of mine plans by Chief Inspector, including approval of the filed plan of the system to work the mine; stability approval for tailing impoundments; reclamation permit authorizing commencement or continuance of work in accordance with approved program for reclamation and conservation.

Municipal Act

Municipal Councils, Regional District Boards.

• By-laws within municipal and regional district boundaries.

Navigable Waters Protection Act (Canada)

Navigable Waters Protection Act Programs Division, Canadian Coast Guard, Transport Canada

• Projects that include any works in, upon, over, under, through or across navigable waters must be approved by Transport Canada under the federal Navigable Waters Protection Act.

Park Act

Ministry of Lands and Parks

• Park use permit or resource use permit in recreation area necessary in order to carry out certain activities including industrial or commercial activities.

Pesticide Control Act

Pesticide Control Branch, Ministry of Environment

• Permit from Pesticide Control Branch for the use of pesticides.

Petroleum and Natural Gas Act

Energy Resources Division, Ministry of Energy, Mines and Petroleum Resources

• Geophysical license for exploration; production facility, plan plant and storage schedule approvals; natural gas license upon discovery; petroleum/natural gas lease for production, well/test hole authorizations, drilling reservation, rig license; Certificate of Restoration.

Pipeline Act

Engineering and Inspection Division, Ministry of Municipal Affairs, Recreation and Culture

• Approval of high pressure pipelines; Approval to cross highway, private road, railway (see Railway Act), irrigation ditch, drain, telegraph, telephone or electric power line or pipeline; Other restrictions regarding alterations, spillage; Compliance with Canadian Standards Association Code.

Range Act

Ministry of Forests

• Provisions regarding the use of Crown range for grazing, hay production or other purposes, including provisions regarding the control of livestock, revegetation, etc., in grazing reserves.

Soil Conservation Act

Agricultural Land Commission, Ministry of Agriculture, Fisheries and Food

• Approval and permit necessary for the removal of soil from an agricultural land reserve. Regulations to prevent and control soil erosion.

Utilities Commission Act

Energy Resources Division, Ministry of Energy, Mines and Petroleum Resources; B.C. Utilities Commission

• Energy project and energy operation certificate for the construction and operation of a regulated project. Energy removal certificate for the removal of energy resource from the province. Regulation of public utilities, including certificates of public convenience and necessity from Utilities Commission.

Waste Management Act

Ministry of Environment

• Permit or temporary approval for the discharge or emission of effluent, waste material, contaminants on land, into water or into the air; restrictions regarding the discharge or disposal of litter, sewage or waste on land or into water.

Water Act

Water Management Division, Ministry of Environment

• Water license or approval from the Comptroller of Water Rights for the use, diversion or storage of water for the alteration of streams or channels and operation of works in and about water bodies. Permits authorizing the flooding of Crown land or the construction, maintenance or operation of works on Crown land.

Weed Control Act

Crop Protection Branch, Ministry of Agriculture, Fisheries and Food

• Requirements regarding the control and eradication of noxious weeds growing or located on land and premises.

Wildlife Act, Firearm Act

Fisheries, Wildlife, Integrated Resources Division, Ministry of Environment

• Hunting, trapping and guiding licences; Restrictions and regulations regarding hunting, trapping, guiding and the preservation of wildlife habitat; Permits for shooting, control of firearms.

FIGURE 1
SMALL POWER PROJECT REVIEW PROCESS:*
POWER FOR SALE

STEP 1:

Electricity Buyer calls for proposals.

STEP 2: ↓

Proponent consults Buyer on interconnection feasibility.
Proponent submits Water Licence Application (small hydro, and thermal if required) or Waste Management Permit Application (small thermal, if required), and application for tenure over Crown land, if required, to appropriate government agencies.

STEP 3: ↓

Proponent conducts technical and financial analysis of proposed project and consults affected government agencies, Native groups, public interest groups and individuals to identify key environmental and socio-economic issues.

STEP 4: ↓

Proponent prepares and submits proposal, including ESS report, to Buyer

STEP 5: ↓

Buyer completes preliminary "short-list" based on price and technical feasibility and forwards "short-listed" project ESS reports to Small Power Committee.**

STEP 6: ↓

Small Power Committee:
(1) reviews ESS report;
(2) finalizes "short-list";
(3) decides on appropriate review process;
(4) initiates EARP, if necessary

STEP 7: ↓

Buyer informs Proponents which projects "short-listed" and commences negotiations for Electricity Purchase Agreements.***

STEP 8:

8(a)

Water Licence or Waste Management Permit Process

↓

Application for Water Licence or Waste Management Permit approved or rejected. The licences and permits may be appealed.

↓

Project exempted from S.27 of Utilities Commission Act.

→ Order in Council regulating project under Utilities Commission Act

8(b)

Proponent submits Energy Project Certificate Application and proceeds through Energy Project Review Process

↓

Disposition Options:

(1) 19(1)(a) Public Hearing by B.C. Utilities Commission

↓

Recommendations to Cabinet

↓

Energy Project Certificate issued or refused. Applications for Water Licence or Waste Management Permit approved, if project approved.

OR

(2) 19(1)(c) Minister's Order issued. Applications for Water Licence or Waste Management Permit approved.

OR

(3) 19(1)(d) Project Rejected

* This review process applies to projects to generate less than 20 MW of electricity, some or all of which is for sale. Projects of greater than 20 MW are automatically regulated under the Utilities Commission Act.

** For projects in B.C. Hydro's "Small Independent Power Program", B.C. Hydro sets the price and short-lists projects based on interconnection and technical feasibility.

*** B.C. Hydro uses a standard agreement for projects in the "Small Independent Power Program". Terms and conditions of standard agreements are not negotiable.

FIGURE 2
SMALL POWER PROJECT REVIEW PROCESS: POWER FOR OWN USE

STEP 1: Proponent proposes project to generate between 500 kW and 20 MW of power for own use. Proponent submits Water Licence Application (small hydro, or small thermal, if required), or Waste Management Permit Application (small thermal if required) application for tenure over Crown land, as required, to appropriate government agencies.

STEP 2: Proponent consults government agencies, Native Groups, public interest groups and individuals affected by proposed project to identify key environmental and socio-economic issues.

STEP 3: Proponent prepares and submits ESS report as addendum to Application for Water Licence or Waste Management Permit.

STEP 4: Licensing/permitting Branch does referral of the application and ESS report according to normal licensing/permitting process.

STEP 5: Licensing/permitting Branch:
(1) completes review through normal process if deemed appropriate; or

(2) may refer ESS report to Small Power Committee (SPC) with recommendation that project be "regulated" under Utilities Commission Act (UC Act) if there are significant environmental or socio-economic impacts, or public concerns.

STEP 6: If licensing/permitting branch recommends Option 2, in Step 5, the SPC will:
(1) decide on appropriate review process;
(2) inform proponent, if project is to be "regulated" under UC Act (This decision may be appealed to the Province's Energy Project Coordinating Committee); and
(3) initiate EARP, if necessary.

STEP 7:

Order in Council regulating project under Utilities Commission Act

7(a)

Normal Water Licence or Waste Management Permit

Water Licence or Waste Management Permit issued or refused. The licenses and permits may be appealed.

7(b)

Proponent submits Energy Project Certificate Application and proceeds through Energy Project Review Process

Disposition Options:

(1)19(1)(a) Public Hearing by B.C. Utilities Commission

Recommendations to Cabinet

Energy Project Certificate issued or refused. Applications for Water Licence or Waste Management Permit approved, if project approved.

OR

(2)19(1)(c) Minister's Order and Water Licence or Waste Management Permit issued.

OR

(3)19(1)(d) Project Rejected

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